respectively by the year 2011-12 so as to ensure food security in the country. Besides, Integrated Cereal Development Programmes under Macro Management and Integrated Scheme of Oilseeds, Pulses, Oilpalm and Maize (ISOPOM) are also in operation to enhance the production of cereals and pulses in the country.

(e) The total foodgrains production during 2005-06 was 208.6 million tonnes which increased progressively during successive years to a level of 217.28 million tonnes during 2006-07 and 227.32 million tonnes during 2007-08 (3rd Advance Estimates) and as such there is on shortfall of foodgrains in the country.

Recommendation for changing the time of sowing seeds

3406. SHRI MAHENDRA MOHAN:
SHRI KALRAJ MISHRA:

Will the Minister of AGRICULTURE be pleased to state:

(a) whether it is a fact that the scientists of the National Agricultural Research Institute revealed that due to climate change, the productivity of wheat and other cereals in North-West region of India has been less;

(b) whether the Institute has also recommended to change the timings of sowing of seeds;

(c) if so, the details thereof; and

(d) in how many areas the global warming has impact on agriculture and to which extent?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI KANTI LAL BHURIA): (a) Research studies have shown that climate change in future may reduce the productivity of wheat and other cereals in North-West region of India.

(b) and (c) No, Sir. The Institute has not recommended to change the time of sowing of wheat at present due to climate change. However, research indicates that changing the time of planting could be an important adaptation strategy in future to reduce the negative effects of climate change.

(d) Inter-governmental Panel on Climate Change (IPCC) studies have shown that, in general, agriculture of temperate countries in Northern Europe and North America will benefit in future to some extent with increase in temperatures, whereas, agriculture of tropical countries in Asia and Africa will be negatively affected. Studies are being done to assess the vulnerability of agriculture in different States of India.

Avian epidemic in various states

3407. SHRI A. VIJAYARAGHAVAN: Will the Minister of AGRICULTURE be pleased to state:

(a) whether Competent Authority had examined the socio-economic impact of out break of avian epidemic in the various States;

(b) if so, the details including States affected, number of birds culled, financial loss, compensation granted, number of farmers affected for the last five years, year-wise, State-wise and category-wise;

(c) if so, the details of long term plan, if any, for rehabilitation of the farmers affected by above epidemic; and

(d) the steps taken to improve solutions due to avian epidemic?